

SUPPORT FOR THE AMENDMENTS

Claims 1 and 5 have been amended.

Support for the amendment of Claims 1 and 5 is provided, for example, by Figure 1, section 2(2) on pages 6-8, page 18, lines 8-11, page 19, lines 22-28, page 20, line 1 to page 21, line 4, page 32, lines 2-8, and the Examples.

No new matter has been added by the present amendment.

REMARKS

Claims 1-18 are pending in the present application.

The rejection of Claims 1-8, 10-13, 15 and 18 under 35 U.S.C. §102(b) over Wiktorowicz et al is respectfully traversed.

The Examiner alleges that Wiktorowicz et al disclose a detection method comprising (1)(2)modifying/cleaving cysteinyl protein (citing column 12, line 37, “cysteine-selective reagents”) and (3) detecting modified-cleaved cysteinyl protein (citing the word “Electrophoresis” in the Title). Applicants submit that Wiktorowicz et al do not anticipate the claimed invention.

Wiktorowicz et al disclose iodoacetamide and maleimide functionalities as specific examples of the term “cysteine-selective reagents.” In fact, the iodoacetamide and maleimide can modify free SH groups of cysteine residues of cysteinyl proteins. However, despite the Examiner's position, the iodoacetamide and maleimide do not cleave cysteinyl proteins/disulfide bonds thereof. Wiktorowicz et al do not disclose or suggest a cleaving step of a protein.

In contrast, the method of the present invention comprises modifying of free SH groups of a protein (see, the step (A) and “o” of Fig. 1, the left side) and *subsequently* cleaving disulfide bonds of the modified protein (see, the step [B] of Fig. 1, the left side; the conversion of “S-S” into two “SH”). These steps only enable a protein that initially contained disulfide bonds to be labeled (see, “•” of Fig. 1, the left side).

At no point do Wiktorowicz et al disclose or suggest the cleaving step of disulfide bonds of modified cysteinyl protein. The standard for determining anticipation requires that the reference “must teach every element of the claim” (MPEP §2131). Thus, since

Wiktorowicz et al do not describe all the elements of the claimed invention, Wiktorowicz et al can not anticipate the claimed invention.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 1, 2, 4-6, and 8-18 under 35 U.S.C. §102(b) over Buchanan et al is respectfully traversed.

The Examiner alleges that Buchanan et al disclose a detection method comprising (1)(2)modifying/cleaving cysteinyl protein (citing column 14, line 10 “mBBr Fluorescent Labeling””) and (3) detecting modified-cleaved cysteinyl protein (citing column 14, line 10, “SDS-polyacrylamide Gel Electrophoresis Analysis”).

However, “mBBr” described in Buchanan et al fluorescently labels or modifies free SH groups of cysteine residues of cysteinyl proteins, but mBBr does not cleave cysteinyl proteins and disulfide bonds of proteins. Buchanan et al do not disclose or suggest a cleaving step of a protein.

At no point do Buchanan et al disclose or suggest the cleaving step of disulfide bonds of modified cysteinyl protein. The standard for determining anticipation requires that the reference “must teach every element of the claim” (MPEP §2131). Thus, since Buchanan et al do not describe all the elements of the claimed invention, Buchanan et al can not anticipate the claimed invention.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 9, 14, 16, and 17 under 35 U.S.C. §112, second paragraph, is respectfully traversed.

The Examiner alleges that the term “house dust” is indefinite because the composition of “house dust” is not clear. Applicants submit that the term “house dust” is generally used to indicate a well-known typical allergenic agent. A skilled artisan in the field of the present invention would clearly understand the term “house dust” and thus “house dust” is not indefinite.

To illustrate the same, the Examiner is referred to Engebretson (1971) Am J Public Health. 1971 February; 61(2): 366–375 (a copy of which is **submitted herewith**), which describes as follows: “House dust, molds, and pollens are the three allergically important offenders found in the home. House dust is a ubiquitous conglomerate composed of tiny particles from many sources. It may contain particles of wool, feathers, cotton and cottonseed, molds, bacteria, hair and skin scales (dander) from human beings and animals, plaster, wallpaper, paint, cosmetics, outdoor substances such as street dust, pollens, dried insect dust, garden molds, and other substances.” (Engebretson, p 369, right-hand column, lines 1-13 under the heading “Odors and Allergies Arising from Indoor Environments”). Further, even Wikipedia recognizes and defined house-dust at http://en.wikipedia.org/wiki/Dust#House_dust.

Applicants remind the Examiner that definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made (MPEP §2173.02). As such, Applicants submit that based on the general knowledge in the art, the skilled artisan would readily appreciate the full scope and meaning of the term “house dust.”

In view of the foregoing, Applicants request withdrawal of this ground of rejection.

The rejection of Claims 1 and 5 under 35 U.S.C. §112, second paragraph, is believed to be obviated by amendment.

Claims 1 and 5 have been amended to bridge the alleged gap between steps. For example, the claims have been amended to include the purpose of the “modifying”. Also, Claim 5 has been amended to include additional steps following the “detecting” step.

Withdrawal of this ground of rejection is requested.

The objection to the abstract is believed to be obviated by submission of a substitute Abstract herewith. Withdrawal of this ground of objection is requested.

The objection to the drawings for allegedly lacking sufficient gel resolution is believed to be obviated by submission of replacement drawings for Figures 2A, 2B, 3, 4, and 5. Withdrawal of this ground of objection is requested.

With respect to the IDS filed on May 3, 2005, Applicants note that the the Examiner has indicated that she has not considered references AG and AT listed on this IDS. With respect to reference AG (Takio, 1990), the Examiner alleges that it is a “bad cite” and that Applicants need to identify the source of the translation. Applicants disagree.

37 CFR 1.98(b)(5) requires that “Each publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication.” Applicants submit that sufficient information is provided for reference AG to be considered proper under 37 CFR 1.98(b)(5) and MPEP 609.04(a).

With respect to the translation, the Examiner is reminded that 37 CFR 1.98(a)(3)(ii) requires that “A copy of the translation if a written English-language translation of a non-English-language document, or portion thereof, is within the possession, custody, or control of, or is readily available.” No where in the rule relating to submission of an English translation is it required that Applicants provide the “source of translation.” Applicants have met the requirements under 37 CFR 1.98(a)(3)(ii) and have provided the Examiner with a written English-language translation of a non-English-language document, or portion thereof, that is within their possession, custody, or control of, that was readily available.

In view of the foregoing, Applicants submit that the citation for reference AG is proper and this reference should be considered. To this end, Applicants submit herewith a new Form PTO-1449 listing this reference.

With respect to reference AT (Yano, Nat'l Ag Res. Ctr.), the Examiner alleges that it is a “bad cite” and that Applicants need to: (a) identify the web-site address and retrieval date, and (b) the source of the translation. In regard to criticism (a), Applicants provide herewith a new Form PTO-1449 listing in which the web-site address (i.e., <http://narc.naro.affrc.go.jp/chousei/shiryou/press/allergen/allergen.htm> and <http://narc.naro.affrc.go.jp/chousei/shiryou/press/allergen/zu2.htm>) and the retrieval date (i.e., February 27, 2003) are added for this reference. In regard to criticism (b), Applicants again submit that there is no requirement for the source of the translation and the presentation of the English translation on May 3, 2007 is in full compliance with 37 CFR 1.98(a)(3)(ii).

In view of the foregoing, Applicants request that the Examiner acknowledge consideration of reference AG (Takio, 1990) and reference AT (Yano, Nat'l Ag Res. Ctr.) listed on the IDS filed on May 3, 2007, by initialing the enclosed Form PTO-1449 listing these references.

Applicants submit that the present application is in condition for allowance. Early notification to this effect is respectfully requested.

Respectfully submitted,

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